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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,027	01/23/2002	Thomas A. Kraker	SMD-125	7502

7590 09/04/2003

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EXAMINER

WALLS, DIONNE A

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 09/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/055,027	KRAKER, THOMAS A.	
	Examiner	Art Unit	
	Dionne A. Walls	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 June 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 and 23 is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-22 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

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## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 4-10, 12-13, 15-16, 18-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson et al (US. Pat. No. 5,878,753).

Peterson discloses nearly all that is recited in the claims (col. 3, lines 15-17; col. 4, lines 51-59. Note: the claim language regarding the film-forming composition being *applied* comprising a film-forming material contained in solution, having a certain solids content, appear to part of process limitations as they recite values attained during a stage of the production of the final cigarette wrapper product. The instant claims are product claims, but they are limited by and defined by parameters occurring during the making of the product. The product of Petersen et al appears to be substantially the same as the product recited in the claims, i.e. a cigarette wrapper with discrete areas treated with a film-forming composition. The method by which this film-forming composition is formed does not patentably distinguish the claims from the prior art. Further, according to MPEP 2113, absent some evidence to the contrary, the fact that the film-forming material solution had a solids content in the claimed amounts has no

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patentable bearing on the end product since this value is relevant to the process conditions regarding the solution and *not* the final paper product. Applicant has not provided evidence of an *unobvious* difference between the paper of Peterson et al and that of the claimed invention. The issue is whether the claimed cigarette paper exhibits any unexpected properties as a result of the claimed solids content/viscosity as compared to the cigarette paper of Peterson et al. Since both cigarette papers appear to be similar, if not identical, Applicant must provide a comparison). While Peterson may explicitly articulate that the film-forming material has a viscosity of less than about 500 cP when present in a 3% by weight solution at 25 degrees C, the Examiner believes that the "poly-vinyl alcohol" film-forming substance that is disclosed in Peterson et al meets this limitation, as poly-vinyl alcohol has a very low viscosity ( Note: see the attached Zimmermann et al reference which discloses conventionally prepared polyvinyl alcohol, which has a viscosity of 3-70 mPa.s (approx. 10 cP) measured at 20 degrees C, at 4% by weight strength aqueous solution (col. 2. lines 18-25). It follows, then, that the same polyvinyl alcohol would also meet the claimed viscosity requirements if such was determined by using a 3% weight solution at 35 degrees C, as claimed).

Regarding claim 9, while Peterson et al may not specifically state that the treated areas of the cigarette wrapper of its invention have a BMI of from about 1  $\text{cm}^{-1}$  to about 5  $\text{cm}^{-1}$ . Where the claimed and prior art product/apparatus is identical or substantially identical in structure or composition, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d

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1252, 1255, 195 USPQ 430,433 (CCPA 1977). In other words, when the structure recited in the reference is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent.

3. Claims 1-10, 12-13, 15-22 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Hotaling et al (US. Pat. No. 5,820,998).

Hotaling et al discloses nearly all that is recited in the claims (Note: Kelgin LV and poly-vinyl alcohol are the substances which appear to correspond to the claimed "film-forming composition"; see entire document). While Hotaling et al may explicitly articulate that the film-forming material of Kelgin LV has a viscosity of less than about 500 cp when present in a 3% by weight solution at 25 degrees C, the Examiner believes that the sodium alginate derivative that is disclosed in Hotaling et al meets this limitations, as this substance appears to have a low viscosity (Note: see the attached Finlayson III et al reference which discloses that Kelgin LV has a viscosity of 16,000 cP measured at 20 degrees C, at a 5% stock solution (col.2, lines 45-49). It follows, then, that this substance would meet the claimed viscosity requirement if such was determined by using a 3 % weight solution at 25 degrees C, as claimed)

Also, the Examiner believes that the "poly-vinyl alcohol" film-forming substance that is disclosed in Hotaling et al (see sample #4 in Table 1) meets this limitation, as poly-vinyl alcohol has a very low viscosity ( Note: see the attached Zimmermann et al reference which discloses conventionally prepared polyvinyl alcohol, which has a viscosity of 3-70 mPa.s (approx. 10 cP) measured at 20 degrees C, at 4% by weight strength aqueous solution (col. 2, lines 18-25).

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It follows, then, that the same polyvinyl alcohol would also meet the claimed viscosity requirements if such was determined by using a 3% weight solution at 25 degrees C, as claimed).

4. Claims 3 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson et al (US. Pat. No. 5,878,753) in view of Hotaling et al (US. Pat. No. 5,820,998).

While Peterson et al may not teach using sodium alginate, specifically, as the film-forming composition, Hotaling shows that sodium alginate, applied in bands to a cigarette paper, can be utilized as a film-forming composition to reduce the permeability on those banded areas (see abstract; col. 2, line 10). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to apply, to the cigarette paper of Peterson et al, sodium alginate, as a film-forming composition, in order to reduce the ability of a cigarette to ignite a combustible material, and to promote the self-extinguishing of a cigarette after burning undisturbed for a certain period of time, as taught in Hotaling et al (see col. 1, lines 12-18).

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson et al (US. Pat. No. 5,878,753) in view of Cohn (US. Pat. No. 4,453,553).

While Peterson et al may not articulate adding citrate to the treated areas, Cohn discloses a cigarette paper, treated with bands, which can include magnesium citrate – in addition to at least one other film-forming substance (see col. 2). It would have been obvious to one having ordinary skill in the art at the

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time of the invention to add the citrate to the treated areas of Peterson et al in order to lower the burn-rate, as taught in Cohn (see col. 2, lines 43-45).

***Allowable Subject Matter***

6. Claims 11 and 23 are allowed.

***Response to Arguments***

7. Applicant's arguments filed June 16<sup>th</sup>, 2003 have been fully considered but they are not persuasive.

- Applicant argues that that the independent claims require that the film-forming material have a viscosity of less than about 500cP when present in a 3% by weight solution, but that this does not reflect the viscosity of the film-forming composition applied to the paper, but rather the molecular weight of the film-forming material. The Examiner now understands the viscosity limitation to be considered a "property" of the film-forming material (as a film-forming material of this low viscosity also reflects a material having low molecular weight – as stated in the instant specification, on page 3). As reflected in the above rejections, the Examiner has examined the claims based on this property being a structural limitation. However, it is still believed that both the Peterson and Hotaling references are readable on the claims, for the reasons stated above in the rejections. Applicant has not proven that the substances in Peterson et al (specifically the polyvinyl alcohol), and either of those disclosed in Hotaling et al

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(specifically, Kelgin LV (not MV) and polyvinyl alcohol) do not meet the viscosity requirements. Therefore, the Examiner believes that both references are proper for use in rejecting the claims of record.

- Applicant also argues that the references fail to disclose the claimed solids content of the film-forming material contained in a solution. Examiner still believes that this portion of the claim involves recitation that is not patentably distinguishable from the references because, as stated above, the fact that the film-forming material solution has a solids content in the claimed amounts has no patentable bearing on the end product since this value is relevant to the process conditions regarding the *solution* and not the *final paper product*.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne A. Walls whose telephone number is (703) 305-0933. The examiner can normally be reached on Mon-Fri, 7AM - 4:30PM (Every other Friday off).

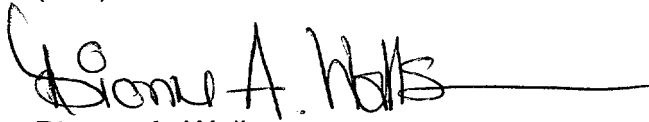
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on (703) 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.



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Any inquiry of a general nature or relating to the status of this application  
or proceeding should be directed to the receptionist whose telephone number is

(703)308-0661.

A handwritten signature in black ink, appearing to read "Dionne A. Walls", followed by a horizontal line.

Dionne A. Walls  
August 29, 2003